I, Prashant G. Karnadikar, declare and say as follows:

That I am an inventor named on U.S. Patent Application Serial No. 10/663,359, entitled "Silicon Carbide Armor Bodies, and Methods for Making Same", hereinafter referred to as "the '359 Application";

That the above-identified patent application is subject to an obligation of assignment to M Cubed Technologies, Inc., a Delaware corporation with facilities in Monroe, Connecticut and Newark, Delaware;

That I am employed by M Cubed Technologies, Inc. at its Delaware facility as the Director of Research & Development;

That I am familiar with the invention claimed in the above-identified patent application;

That the claimed invention relates to low (thermal) expansion metal-ceramic composite articles, and particularly to reflector articles such as mirrors;

That the claimed mirror comprises a reflecting surface bonded to a substrate;

That the substrate includes a plurality of coated carbon fibers distributed in a matrix comprising silicon metal;

That the coating on the carbon fibers is non-graphitic in character;

Specifically, that the coating on the carbon fibers may be, or include, elemental carbon, but that the only techniques taught in the '359 Application for coating carbon onto carbon fibers inherently are non-graphitic in character;

More specifically, that the technique that is taught in the '359 Application for coating carbon onto a fiber is pyrolysis, i.e., the formation of pyrolyzed carbon;

That graphitizing is a special form of carbon pyrolysis, specifically a high-temperature form;

That graphitizing requires temperatures on the order of about 2000°C;

That the elevated-temperature processing temperatures of the instant invention consist of pyrolyzing a carbon or carbonaceous coating at about 900°C, and infiltrating silicon metal at around 1425°C;

That these processes and specifically these processing temperatures will <u>not</u> convert the pyrolyzed carbon coating to graphite;

That as such, the technique of the instant invention for coating carbon onto fibers is <u>not</u> graphitizing;

That therefore the coatings of the instant invention are always and inherently non-graphitic in nature; and

That I understand that all statements made herein of my own knowledge are true and that statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Further, declarant sayeth not.

Parandikar ii 16 09
Prashant G. Karandikar Date